

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 60162432  
PUBLICATION DATE : 24-08-85

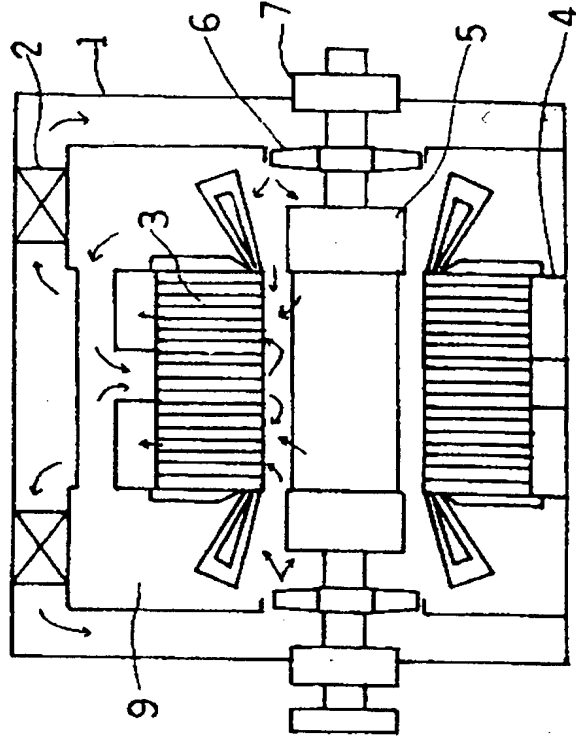
APPLICATION DATE : 01-02-84  
APPLICATION NUMBER : 59017833

APPLICANT : MITSUBISHI ELECTRIC CORP;

INVENTOR : SAKABE MOICHI;

INT.CL. : H02K 9/08

TITLE : COOLER OF FULLY-CLOSED ROTARY ELECTRIC MACHINE



**ABSTRACT :** PURPOSE: To lower the temperature of a coil by employing gas mixed optimally with air and helium as coolant sealed in a fully-closed rotary electric machine.

CONSTITUTION: Helium which has smaller specific weight than air and no explosive property and air are optimally mixed as coolant 9 sealed in a fully- closed rotary electric machine. In this case, the volumetric ratio of the helium is 40~90%, and the sealability of the frame 1 is set to maintain the above volumetric ratio. Thus, since windage loss can be largely reduced, thermal transmission rate can be improved, the temperature of a coil for limiting the performance of the machine can be reduced to decrease the size.

COPYRIGHT: (C)1985,JPO&Japio